



Cooperative Learning

RESOURCES:

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Cooperative learning has received increased attention in recent years due to the movement to educate students with disabilities in the least restrictive environment. Children with disabilities bring social needs, as well as academic needs, which are not easily met in the regular classroom. The use of classroom cooperative learning peer groups with cooperative goal structures is a promising alternative to better serve students with disabilities in the least restrictive environment. In addition, it may also serve as a vehicle for improving the overall social and academic climate for a school. As a result, it might also be considered to be an intervention of use in promoting appropriate behavior of students in school, and in creating a positive behavioral climate in a school, thus preventing violence.

Overview: What is Cooperative Learning?

Cooperative learning has been defined as "small groups of learners working together as a team to solve a problem, complete a task, or accomplish a common goal" (Artz & Newman, 1990, p. 448). The cooperative learning model requires student cooperation and interdependence in its task, goal, and reward structures. The idea is that lessons are created in such a way that students must cooperate in order to achieve their learning objectives.

Although the basic principles of cooperative learning do not change, there are several variations of the model. The leading developers of cooperative learning include Robert Slavin, Roger and David Johnson, and Spencer Kagan, all of whom have slightly different approaches and emphases (Metzke & Berghoff, 1999). Johnson and Johnson (1975) focus on developing a specific structure that can be incorporated with a variety of curriculums, with an emphasis on integrating social skills with academic tasks. Kagan's work focuses on the use of many different structures to help facilitate active learning, team building, and group skills. Slavin's work utilizes methods from both Johnson and Johnson and Kagan, and has resulted in the development of specific cooperative learning structures.

Several approaches to cooperative learning include Circles of Learning (Johnson, Johnson, Holubec & Roy, 1984), Student Teams Achievement Divisions (STAD), Jigsaw, Group Investigation, and the Structural Approach (Arends, 1997). These are all specific models teachers can use to set up cooperative learning groups and to structure lessons.

What We Know About Cooperative Learning

The effects of cooperative learning activities have been positive for increased academic achievement in recent empirical studies conducted with students with and without disabilities. In considering the effects of cooperative learning on academic achievement, researchers have repeatedly examined cooperative versus individualistic instruction. Recent studies have evaluated the effects of cooperative and individualistic learning experiences by comparing achievement of academically handicapped, normal-progress, and gifted students. Results indicate that cooperative learning experiences promote higher achievement and greater retention than do individualistic learning experiences for all students (Stevens & Slavin, 1995a).

Cooperative learning, in addition to impacting academic achievement, also positively influences attitudes of and towards students with disabilities. Cooperative learning's effects on attitudes are evidenced by increases in self-esteem, social acceptance, and teacher ratings of students with disabilities (Putnam, Markovchick, Johnson, & Johnson, 1996). Cooperative learning has also been used as a vehicle to guide and shape student behavior (Johnson & Johnson, 1975).

Making It Work

In incorporating cooperative learning strategies into the classroom curriculum, two factors have been found to contribute to positive achievement effects: group goals and individual accountability (Slavin, 1996). Group goals are necessary to motivate students to help each other learn by giving them a stake in one another's success. Individual accountability, in turn, deters the likelihood that one or two group members will do all the work. If the group's success depends on the individual learning of each group member, then group members are more motivated to engage every member in mastering the material being studied.

The Student Teams Achievement Divisions (STAD), developed by Robert Slavin and his colleagues at Johns Hopkins University, is perhaps the simplest and most straightforward of the cooperative learning approaches (Arends, 1997). In STAD, students within a given class are assigned to four- or five-member learning teams, each of which has representatives of both sexes, various racial or ethnic groups, and high, average, and low achievers. After the teacher has introduced the academic material, team members use worksheets to master the academic materials and then help each other learn the material through tutoring, quizzing one another, or carrying on team discussions. The students also receive worksheet answer sheets, emphasizing the importance of learning the concepts rather than simply filling out the worksheets. Following team practices, students individually take quizzes on the material they have been studying. These quizzes are scored, and each individual is given an improvement score. This improvement score is based on the degree to which the score exceeds a student's past averages, rather than on a student's absolute score. Weekly newsletters announce teams with the highest scores and students who have exceeded their own past records by the largest amounts or who have perfect scores on the quizzes.

The success of cooperative learning strategies are not automatically guaranteed. Group composition and group interaction processes have been found to impact the success or failure of cooperative learning groups. Teachers should provide the groups with initial training on cooperative learning procedures as well as group social skills. Teachers should continue to provide on-going monitoring and reinforcement to the students for implementing the procedures. Teachers can also unobtrusively monitor group activities so as to provide the

appropriate level of help at the appropriate time and to prevent the problems of group domination, status effects, and "social loafing." When including students with disabilities in cooperative learning groups, it is important to consider the age of the students as well as accommodations by peers and the type and severity of the disability. Where these groups have not been used in the past, it may take some time for students to learn how to interact within these groups successfully.

Summary

Cooperative learning strategies appear to promise positive effects for students, both with and without disabilities, as reflected in increased academic achievement and improved social attitudes and behavior. The general principle behind cooperative learning is that the students work together as a team to accomplish a common goal, namely that each student learns something of value from the cooperative learning activity. Although cooperative learning activities may require more teacher preparation of group material and monitoring of group activities, the rewards and benefits for both the teacher and students go a long way. They appear likely to positively influence a school's academic and social climates as well.

- Courtney K. Miller & Reece L. Peterson

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About the Safe & Responsive Schools Project

The Safe and Responsive Schools Project, funded by a three-year grant from the U.S. Department of Education Office of Special Education Programs, is dedicated to developing and studying prevention-based approaches to school safety. The Project is currently working with schools in districts in Indiana and Nebraska to integrate best-practice strategies in school violence prevention into comprehensive school-based plans for deterring school disruption and violence. **Visit our web site: www.indiana.edu/~safeschl.**

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